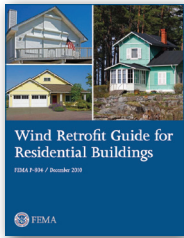


**Coastal Construction Manual: Principles and Practices of Planning, Siting, Designing, Constructing, and Maintaining Buildings in Coastal Areas (FEMA P-55, Fourth Edition, August 2011)** E, C, CO,

To provide mitigation guidance to local officials and professionals in building design and construction, FEMA prepared the third edition of the Coastal Construction Manual. The manual provides a comprehensive approach to sensible development in coastal areas based on guidance from over 200 experts in building science, coastal hazard mitigation, and building codes and regulatory requirements.

<https://www.fema.gov/library/viewRecord.do?id=1671>

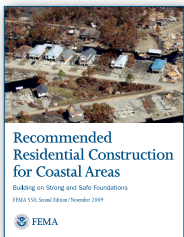


**Wind Retrofit Guide for Residential Buildings (FEMA P-804, December 2010)** E, C, H,

The purpose of this Guide is to provide guidance on how to improve the wind resistance of existing residential buildings in Mississippi and across the Gulf Coast. Although

this Guide was developed to support initiatives in the Gulf Coast region, the content of this document should serve as guidance on retrofitting existing buildings for improved performance during high-wind events in all coastal regions.

<https://www.fema.gov/library/viewRecord.do?id=4569>

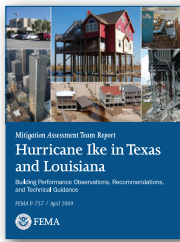


**Recommended Residential Construction for Coastal Areas: Building on Strong and Safe Foundations (FEMA P-550, Second Edition, November 2009)**

E, C, H,

Every storm has shown that while good design and construction cannot completely eliminate risk, they can significantly reduce the risk to life and damage to property. This design manual provides recommended designs and guidance for rebuilding homes destroyed by hurricanes in the Gulf Coast. The manual also provides guidance in designing and building less vulnerable new homes to reduce the risk to life and property.

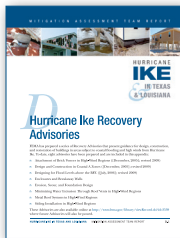
<https://www.fema.gov/library/viewRecord.do?id=1853>



**Hurricane Ike in Texas and Louisiana: Mitigation Assessment Team Report, Building Performance Observations, Recommendations, and Technical Guidance (FEMA P-757, April 2009)** E, C, H,

In response to Hurricane Ike, FEMA deployed a Mitigation Assessment Team (MAT) to evaluate and assess damage from the hurricane and provide observations, conclusions, and recommendations on the performance of buildings and other structures impacted by wind and flood forces. The MAT included FEMA Headquarters and Regional Office engineers, representatives from other Federal agencies and academia, and experts from the design and construction industry. The conclusions and recommendations of this report are intended to provide decision-makers with information and technical guidance that can be used to reduce future hurricane damage.

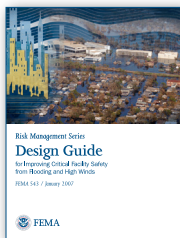
<https://www.fema.gov/library/viewRecord.do?id=3577>



**Hurricane Ike Recovery Advisories (2008)** E, C, CO,

These eight Recovery Advisories are part of the Mitigation Assessment Team (MAT) report for Hurricane Ike (2008) in Texas and Louisiana.

<https://www.fema.gov/library/viewRecord.do?id=3539>



**Design Guide for Improving Critical Facility Safety from Flooding and High Winds (FEMA 543, January 2007)** E, C, CO,

This manual concentrates on critical facilities (hospitals, schools, fire and police stations, and emergency operation centers). It is based on the behavior of critical facilities during

Hurricane Katrina (2005) and makes recommendations on the performance of these types of buildings.

<https://www.fema.gov/library/viewRecord.do?id=2441>

**Flood/Wind Building Science Helpline**  
 FEMA-Buildingsciencehelp@dhs.gov • 1-866-927-2104  
 E (Engineers) / C (Contractors) / CO (Community Officials) /  
 H (Homeowners) / (Available Online) (Available Print)  
 (Available CD)



# Building Science for Disaster-Resistant Communities: Hurricane Hazard Publications

FEMA L-781 / November 2011



**FEMA**





# Building Science for Disaster-Resistant Communities

# Mitigation Works

## Building Science

The Building Science Branch develops and produces technical guidance and tools focused on fostering a disaster-resistant built environment. Located within the FEMA Federal Insurance and Mitigation Administration's (FIMA) Risk Reduction Division, the Building Science Branch supports FIMA's mission to reduce risk to life and property by providing state-of-the-art technical hazard mitigation solutions for buildings. Mitigation efforts provide value to the American people by creating safer communities and reducing loss of life and property.

Building Science publications provide strategies for all types of hazards. This brochure provides readers with a quick summary of publications that will help them prepare for and mitigate against hurricane wind hazards.

To download publications, please visit the FEMA Library at: <http://www.fema.gov/library>.

To order publications please call 1-800-480-2520 or fax 1-240-699-0525 (Monday – Friday, 8:00 a.m. – 5:00 p.m., EST) or email your request to [FEMA-Publications-Warehouse@dhs.gov](mailto:FEMA-Publications-Warehouse@dhs.gov). Please provide the title, publication number, and quantity, along with your name, address, zipcode, and daytime telephone number.

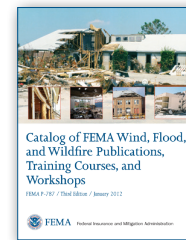
## Hurricane Wind Hazard

Hurricanes are one of the most dramatic, dangerous, and costly events that occur in this country. Powered by heat from the sea, hurricanes move ashore and bring with them a storm surge of ocean water along the coastline, high winds, tornadoes, torrential rains, and flooding. These storms can end up costing our nation millions, if not billions, of dollars in damages.

During a hurricane, homes, businesses, public buildings, and infrastructure may be damaged or destroyed by many different storm hazards. Debris can break windows and doors, allowing high winds and rain inside the home. In extreme storms (such as Hurricanes Hugo, Andrew, and Katrina), the force of the wind alone can cause tremendous devastation, as trees and power lines topple and weak elements of homes and buildings fail. Roads and bridges can be washed away and homes saturated by flooding.

Hurricanes pose a particular hazard to buildings, and proper design and construction are essential to help buildings withstand the impact of these storms.

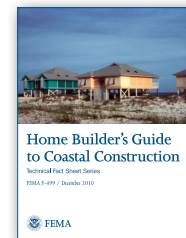
## Building Science Publications



**Catalog of FEMA Wind, Flood, and Wildfire Publications, Training Courses, and Workshops (FEMA P-787, Third Edition, January 2012)** E, C, CO, H,

This catalog contains a listing with brief descriptions of publications and courses developed by the Building Science Branch of FEMA's Mitigation Directorate.

<https://www.fema.gov/library/viewRecord.do?id=3184>



**Home Builders' Guide to Coastal Construction: Technical Fact Sheet Series (FEMA P-499, December 2010)** E, C, CO, H,

FEMA produced this series of 37 fact sheets to provide technical guidance and recommendations concerning the construction of coastal residential buildings.

<https://www.fema.gov/library/viewRecord.do?id=2138>